

Serial No.: 10/003,904
Examiner: Diem K.Cao

In the claims:

Please cancel claim 1-20.

Please add new claims 21-31 below.

Claims 1-20. Cancelled.

21. (new) A data management framework for a data communications network comprising:
a client;

a server, the server provides a dynamically constructed model of at least one element of the data communications network, the model providing a uniform programming interface for allowing the client to dynamically access at least one element and dynamically add a new element in performing network management functions;

the server includes at least one controller communicating with the client;

a model context;

a policy context associated with a policy context application programming interface, the policy context derived from a model context;

the model context including;

a model context class providing default attributes, behavior, and associations,

an application service having an application programming interface, and

a managed object, operatively connected to the application service, and having a managed object entity, wherein the managed object includes a policy managed object derived from a managed object implementation wherein the managed object implementation defines the characteristics of an element, of the one or more elements, that is represented by the managed object and wherein the managed object implementation is derived from the managed object entity wherein the managed object entity provides default attributes, behavior, and associations for the managed object.

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22. (new) The data management framework of claim 21, wherein the application service includes a policy service having a public application programming interface and a policy database.

23. (new) The data management framework of claim 21, wherein the model object is adapted to associate via an association class; the association class having attributes describing qualifications, constraints, and rules of association between a plurality of managed objects.

24. (new) The data management framework of claim 21, wherein the application service invokes a support service wherein the support service is selected from a group consisting of a lightweight directory access protocol database, a simple network management protocol, a database management service, an error-handling service, and an auto-discovery service.

25. (new) The data management framework of claim 21, wherein the application service is a policy management service.

26. (new) A method for data management in a data communications network, comprising:

providing a client and a sever, the server including at least one controller communicating with the client and a model context having a model context class, an application service having an application programming interface, and a managed object, operatively connect to the application service and having a managed object entity;

providing, by the model context class, default attributes, behavior, and associations;

deriving from the model context a policy context, associated with a policy context application programming interface;

providing, by the server, a dynamically constructed model of one or more elements of the data communications network;

providing, by the dynamically constructed model of elements, a uniform programming interface for allowing the client, in performing network management functions, dynamical access to the one or more elements and dynamical addition of a new element, and

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wherein the steps of
providing, by the managed object entity, default attributes, behavior, and associations for
the managed object;

deriving a managed object implementation from the managed object entity;

driving a policy managed object from the managed object implementation; and

creating, by the managed object implementation, characteristics of an element
represented by the managed object, the managed object including the policy managed object
derived from the managed object implementation.

27. (new) The method for data management in a data communications network of claim 26,
further including the step of dynamically adding a new application service to the server via a new
model context.

28. (new) The method for data management in a data communications network of claim 26,
wherein the application service includes a policy service having a public application
programming interface and policy database.

29. (new) The method for data management in a data communications network of claim 26,
wherein the model object is adapted to associate via an association class; the association class
having attributes describing qualifications, constraints, and rules of association between a
plurality of managed objects.

30. (new) The method for data management in a data communications network of claim 26,
wherein the application service invokes a support service wherein the support service is selected
from a group consisting of lightweight directory access protocol databases, simple network
management protocol, database management services, error handling, and auto-discovery
service.

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31. (new) The method for data management in a data communications network of claim 26, wherein the application service is a policy management service.